

Environmental Exposure

	Unexposed	Humidity(1)	Weathering(2)
Light Transmittance (%) (3)	91	91	0
Haze (%) (3)	0.4	0.5	1 - (7)
Adhesion (%) (3)	100	100	100
Yellowness Index Change (6)	0	0	3-4

1. Humidity: 120 hours @ 52°C and 100%RH (ASTM D-2247)
2. Weathering: ASTM G-53 (cycle of 8 hrs UV@70°C and 4 hrs condensing humidity @ 50°C for 1,000 hrs using Q-Panel QUV test equipment)
3. Light Transmittance: ASTM D-1003
4. Haze ASTM D-3359
5. Adhesion: ASTM D-3359
6. Yellowness Index: ASTM D-1925
7. After 1000 hours of QUV exposure start of color change of the polycarbonate substrate

Scratch Abrasion Tests

	Haze Change (4)	
	Uncoated	Coated
Steel-Wool Scratch (8)	28.1	0.4
Taber Abrasion (9) 100 Cycles	32.0	3-4

8. Steel-Wool Scratch: Steel-wool rotary test representing severe scratching using a 1.25 square-inch #0000 steel-wool pad @ 24 psi for 100 rotations
9. Taber Abrasion : ASTM D-1044 (CS10F wheels with 500g load)

Chemical Resistance (10), (11)

	Uncoated	Coated
Gasoline	X	M
Toluene	X	S
Acetone	X	S
Ethanol	L	L
Trichloroethylene	X	S
5% Ammonia	S	L
10% Caustic Soda	S	L
50% Caustic Soda	X	M
10% Sulfuric Acid	L	L

10. Chemical Resistance: Similar to ASTM D-1308 but more severe (evaporation minimized through continuous contact with reagent by means of a pad in the mouth of an inverted bottle placed on the specimen)
11. L - Long term contact, greater than 24 hours
M - Medium term contact , up to 8 hours
S - Short term contact , up to 1 hour
X - Immediate attack ; do not use

VUEGUARD 911®

Our Vueguard 911® coating treatment is available as Water-Clear(WC) for plastic sheets and molded articles, offering superior resistance to ultra violet degradation and abrasion. While Vueguard 911® has been designed primarily for polycarbonate substrates, other plastics may benefit from its application.

